

**REMARKS**

Claims 1-30 are pending in this application. Applicant gratefully acknowledges that the Office Action indicates that claims 5, 9, 11-14, 18, 20-22, 26, and 28-30 contain allowable subject matter. However, for at least the reasons described below, Applicant respectfully submits that all claims 1-30 contain allowable subject matter. Therefore, reconsideration of the application is respectfully requested.

Applicant appreciates the courtesies shown to Applicant's representatives by Examiner Behm in the August 8, 2006 telephonic interview (hereinafter Interview). Applicant's separate record of the substance of the interview is incorporated into the following remarks.

**I. Formal Matters**

The Office Action objects to claims 1-30 because, according to the Office Action, "a follow-up property" and "a reference property" are not defined in the claims 1, 15, and 23 (Office Action, pg. 2, lines 5-7). During the Interview, the Examiner noted that Applicant may explicitly define "a follow-up property" and "a reference property" in the Specification to obviate the objections of claims 1-30. Applicant appreciates the suggestion to include explicit definitions, however, Applicant respectfully declines to amend the claims or the Specification because Applicant believes that the Specification provides sufficient disclosure for "a follow-up property" and "a reference property" to be understood by one of ordinary skill in the art. For example, Figure 8 and its corresponding disclosure (Specification, pg. 23, line 25 - pg. 25, line 21) disclose "a follow-up property" and, for illustration purposes, provide embodiments of "a follow-up property" (See, *e.g.*, Fig. 8, curves k2, k3, and k4; Specification, pg. 24, lines 1-2 and 17-19; pg. 25, lines 6-8). Furthermore, Figure 8 and its corresponding disclosure (Specification, pg. 23, line 25 - pg. 25, line 21) disclose "a reference property" and, for illustration purposes, provide an embodiment of "a reference property"

(See, e.g., Fig. 8, curve k2; Specification, pg. 24, line 2 and 18-19; pg. 25, lines 7-8).

Accordingly, Applicant respectfully requests the withdrawal of the objection to the claims.

Next, the Office Action stated that the element "a chopper circuit" is not defined in the claims, and "[f]or the purpose of examination," assumed it "to mean a DC-DC converter." (Office Action, pg. 2, lines 8-9). Applicant acknowledges the Office Action's assumption, however, Applicant respectfully declines to accept the Office Action's characterization of "a chopper circuit" in the claims.

## **II. Claims Define Patentable Subject Matter**

The Office Action rejects claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27 under 35 U.S.C. § 102(b) as being anticipated by *Sawtell* (U.S. Patent No. 5,949,225). Applicant respectfully traverses this rejection.

Specifically, Applicant asserts that *Sawtell* does not disclose or suggest a voltage conversion apparatus converting a direct current voltage from a DC power supply into an output voltage such that the output voltage is equal to a designated voltage including at least a control unit controlling a voltage converter such that a follow-up property of the output voltage with respect to the designated voltage in feedback control is consistent with a reference property, and the output voltage is equal to the designated voltage, based on a detected output voltage and the designated voltage, as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

In contrast, *Sawtell* discloses an adjustable feedback circuit for adaptive opto drives (*Sawtell* title). The feedback circuit in *Sawtell* has "an input stage, an output stage having an output voltage, and a feedback element" containing a transmitter coupled to the output stage and a receiver coupled to the input stage, in which the feedback circuit couples an amplified output from the receiver to the input stage to cause the receiver to operate at a substantially fixed bias operating current (*Sawtell* abstract). *Sawtell's* feedback circuit compensates for

unwanted variations in an optocoupler's gain, such as those caused by thermal drift or aging (*Sawtell* col. 3, lines 50-53), by exponentially adjusting a drive signal as a function of the feedback control signal, which causes a phototransistor to "operate at a substantially predetermined bias operating current" (*Sawtell* col. 4, lines 10-19; col. 7, lines 30-40).

Moreover, *Sawtell* discloses that a current control signal (*Sawtell* col. 7, line 39, Equation 1) is exponentially related to a differential between a reference voltage (*Sawtell* col. 7, line 15-6, " $V_{ref}$ ") and a feedback control signal (*Sawtell* col. 7, lines 13-40), but does not teach or suggest at least a control unit controlling a voltage converter such that a follow-up property of the output voltage with respect to the designated voltage in feedback control is consistent with a reference property, and the output voltage is equal to the designated voltage, based on a detected output voltage and the designated voltage, as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

Accordingly, *Sawtell* fails to disclose a voltage conversion apparatus converting a direct current voltage from a DC power supply into an output voltage such that the output voltage is equal to a designated voltage as recited in independent claim 1 and similarly recited in independent claims 15 and 23. In accordance with the above remarks, Applicant submits that independent claim 1 defines patentable subject matter. Claims 2-14 depend from claim 1, and therefore, also define patentable subject matter, as well as for the additional features they recite.

Independent claims 15 and 23, although of different scope, recite features similar to those of claims 1 that define patentable subject matter. Therefore, Applicant submits that independent claims 15 and 23 are also patentable over *Sawtell*. Claims 16-22 and 24-30 depend from claims 15 and 23, respectively, and therefore, also define patentable subject matter, as well as for the additional features they recite. Thus, Applicant respectfully requests the withdrawal of the §102(b) rejection of claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration of claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27 and prompt allowance of claims 1-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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